



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0786; Project Identifier MCAI-2021-00429-A; Amendment 39-21843; AD 2021-24-22]

RIN 2120-AA64

Airworthiness Directives; Pilatus Aircraft Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2012-06-16, which applied to all Pilatus Aircraft Ltd. (Pilatus) Model PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2 airplanes. AD 2012-06-16 required installing a new rudder and elevator locking screw and modifying the installation of the rudder and elevator hinge bolt. Since the FAA issued AD 2012-06-16, the European Union Aviation Safety Agency (EASA) superseded its mandatory continuing airworthiness information (MCAI) to correct an unsafe condition on these products. This AD does not retain any actions required by AD 2012-06-16 and requires inspecting and modifying the rudder, elevator, and right-hand (RH) aileron hinge bolt installations. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Pilatus Aircraft Ltd., Customer Support General Aviation, CH-6371 Stans, Switzerland; phone: +41 848 247 365; email: techsupport.ch@pilatus-aircraft.com; website:

<https://www.pilatus-aircraft.com>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0786; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the MCAI, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2012-06-16, Amendment 39-16997 (77 FR 19061, March 30, 2012) (AD 2012-06-16). AD 2012-06-16 applied to all Pilatus Model PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2 airplanes and required installing a new elevator and rudder locking screw and modifying the installation of the elevator and rudder hinge bolt. The NPRM published in the *Federal Register* on September 17, 2021 (86 FR 51835).

The NPRM was prompted by AD 2021-0098, dated April 9, 2021 (referred to after this as “the MCAI”), issued by EASA, which is the Technical Agent for the Member States of the European Union. The MCAI states:

Occurrences were reported where, on certain PC-6 aeroplanes, the elevator or the rudders was lost or partially detached during flight. All the occurrences happened on PC-6 aeroplanes in CONFIG 1.

This condition, if not corrected, could lead to in-flight failure of the elevator or rudder attachment, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, Pilatus issued SB 55-001 (original issue and Revision 1) to provide rework instructions for the elevator and rudder hinge bolt locking. Consequently, EASA published AD 2011-0230 to require this rework. Subsequently, Pilatus issued recommended SB 55-003 (later revised) to provide instructions to modify the hinge bolt installation of the elevator and rudder. This [service bulletin] SB, being recommended only, had no impact on the existing EASA AD.

Since that [EASA] AD and the recommended Pilatus SB 55-003 were published, the latest risk assessment determined that the modification of the hinge bolt installation of the elevator, rudder and right-hand (RH) aileron installation must be required to reach an acceptable level of safety for the affected aeroplanes. Consequently, Pilatus issued the SB, as defined in this [EASA] AD, to provide instructions to modify the affected aeroplanes into CONFIG 2 standard.

For the reasons described above, this [EASA] AD supersedes EASA AD 2011-0230 and requires, for certain aeroplanes, a one-time inspection of the elevator and rudder installation, followed by repetitive inspections of the elevator and rudder, and, depending on findings, accomplishment of applicable corrective action(s). This [EASA] AD also requires modification of the elevator, rudder and RH aileron hinge bolt installations into CONFIG 2, which is the terminating action for the repetitive inspections required by this [EASA] AD. Finally, this [EASA] AD prohibits (re)installation of affected parts.

You may examine the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0786.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement

with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed Pilatus PC-6 Service Bulletin (SB) No. 55-005, dated February 25, 2021 (Pilatus SB 55-005). The service information specifies procedures for repetitively inspecting the hinge bolt installations and taking any necessary corrective actions until the hinge bolt is modified. Modifying the hinge bolt installation in accordance with Pilatus SB 55-005 makes the airplane a CONFIG 2 design. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

Pilatus also issued Pilatus PC-6 SB No. 55-003, dated November 29, 2013; Pilatus PC-6 SB No. 55-003, Revision 1, dated December 9, 2014; Pilatus PC-6 SB No. 55-003, Revision 2, dated January 19, 2017; and Pilatus PC-6 SB No. 55-003, Revision 3, dated November 6, 2017. This service information specifies procedures for modifying the hinge bolt installations, which makes the airplane a CONFIG 2 design. This service information was superseded by Pilatus SB 55-005.

Costs of Compliance

The FAA estimates that this AD affects 50 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per product	Cost on U.S. operators
Inspecting CONFIG 1 airplanes	4.5 work-hours x \$85 per hour = \$382.50	Not applicable	\$382.50 per inspection cycle	\$19,125 per inspection cycle
Modifying from CONFIG	14 work-hours x \$85 per hour	\$1,200	\$2,390	\$119,500

1 to CONFIG 2	= \$1,190			
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The FAA estimates the following costs to do any necessary corrective actions that would be required based on the results of the mandated inspection. The FAA has no way of determining the number of airplanes that might need these actions:

On-condition costs

Action	Labor Cost	Parts Cost	Cost per product
Accomplishing corrective actions	.5 work-hour x \$85 per hour = \$42.50	\$200	\$242.50

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and

(3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive AD 2012-06-16, Amendment 39-16997 (77 FR 19061, March 30, 2012); and

b. Adding the following new airworthiness directive:

2021-24-22 Pilatus Aircraft Ltd.: Amendment 39-21843; Docket No. FAA-2021-0786; Project Identifier MCAI-2021-00429-A.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2012-06-16, Amendment 39-16997 (77 FR 19061, March 30, 2012).

(c) Applicability

This AD applies to Pilatus Aircraft Ltd. Model PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2 airplanes, all serial numbers, certificated in any category.

Note 1 to paragraph (c): These airplanes may also be identified as Fairchild Republic Company airplanes, Fairchild Industries airplanes, Fairchild Heli Porter airplanes, or Fairchild-Hiller Corporation airplanes.

(d) Subject

Joint Aircraft System Component (JASC) Codes 2700, Flight Control System; 2710, Aileron Control System; 2720, Rudder Control System; and 2730, Elevator Control System.

(e) Unsafe Condition

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as detachment or partial detachment of the elevator or rudder in flight. The FAA is issuing this AD to prevent failure of the elevator or rudder attachment. The unsafe condition, if not addressed, could result in loss of control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definitions

The following definitions apply for purposes of this AD.

(1) Group 1 airplanes: Airplanes that have not been modified in accordance with Pilatus PC-6 Service Bulletin (SB) No. 55-003, dated November 29, 2013 (Pilatus SB 55-003); Pilatus PC-6 SB No. 55-003, Revision 1, dated December 9, 2014 (Pilatus SB 55-003R1); Pilatus PC-6 SB No. 55-003, Revision 2, dated January 19, 2017 (Pilatus 55-003R2); Pilatus PC-6 SB No. 55-003, Revision 3, dated November 6, 2017 (Pilatus 55-003R3); or Pilatus PC-6 SB No. 55-005, dated February 25, 2021 (Pilatus SB 55-005).

(2) Group 2 airplanes: Airplanes that have been modified in accordance with Pilatus SB 55-003, SB 55-003R1, SB 55-003R2, Pilatus SB 55-003R3; or Pilatus SB 55-005.

(h) Inspect Elevator, Rudder, and RH Aileron Hinge Bolt Installations

(1) For Group 1 airplanes: Within 14 days after the effective date of this AD, inspect the elevator, rudder, and RH aileron hinge bolt installations and take any corrective actions before further flight by following the Accomplishment Instructions-Part 1-On Aircraft-Inspection in Pilatus SB 55-005.

(2) For Group 1 airplanes: Within 100 hours time-in-service (TIS) after the inspection required by paragraph (h)(1) of this AD and thereafter at intervals not to exceed 100 hours TIS until the modification required by paragraph (i) of this AD is done, inspect the elevator, rudder, and RH aileron hinge bolt installations and take any corrective actions before further flight by following the Accomplishment Instructions-Part 2-On Aircraft-CONFIG 1-Repeat Inspections in Pilatus SB 55-005.

(i) Modify Group 1 Airplanes

Within 11 months after the effective date of this AD, modify the hinge bolt installations on the elevator, rudder, and RH aileron assemblies by following the Accomplishment Instructions-Part 3-On Aircraft-Modification from CONFIG 1 to CONFIG 2 in Pilatus SB 55-005. Modifying the elevator, rudder, and RH aileron hinge bolt installations terminates the repetitive inspections required by paragraph (h)(2) of this AD.

(j) Installation Prohibition

As of the following applicable compliance time, do not install on any airplane an elevator assembly part number (P/N) 113.50.06.011, 113.50.06.012, 6305.0010.00, 6305.0010.52, 6305.0010.53, 6305.0010.54, or 6305.0010.55, or a rudder assembly P/N 113.40.06.018, 6302.0010.51, or 6302.0010.52.

(1) For Group 1 airplanes: As of the modification required by paragraph (i) of this AD.

(2) For Group 2 airplanes: As of the effective date of this AD.

(k) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (l)(1) of this AD and email: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(l) Related Information

(1) For more information about this AD, contact Doug Rudolph, Aviation Safety Engineer, FAA, General Aviation & Rotorcraft Section, International Validation Branch, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2021-0098, dated April 9, 2021, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2021-0786.

(3) You may obtain information related to Pilatus SB 55-003, SB 55-003R1, SB 55-003R2, Pilatus SB 55-003R3; or Pilatus SB 55-005, which are not incorporated by reference, using the contact information found in paragraph (m)(3) of this AD.

(m) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Pilatus PC-6 Service Bulletin (SB) No. 55-005, dated February 25, 2021.

(ii) [Reserved]

(3) Pilatus Aircraft Ltd., Customer Support General Aviation, CH-6371 Stans, Switzerland; phone: +41 848 247 365; email: techsupport.ch@pilatus-aircraft.com; website: <https://www.pilatus-aircraft.com>.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on November 19, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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